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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,417	09/01/2000	Alanna Marie Quail	60.426-096	7085

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SIEMENS CORPORATION
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EXAMINER	
TO, TUAN C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/654,417	Applicant(s) QUAIL ET AL.	
	Examiner Tuan C To	Art Unit 3663	

-- The MAILING DATE of this communication appears on th cov r sheet with th correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 20-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 20-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12, 15-18, 20-26, 28-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al. (U.S. 5626359) in view of Stanley (U.S. 6220627).

Claims 1, 4, 8-12, 15-18, 20-26, 28-35: Steffens, Jr. et al. disclose a system and a method for controlling an occupant restraint system as claimed (See abstract; Fig. 2; columns 1-4, lines 1-67) except for a child seat sensor for generating a child seat position signal indicating whether a child seat is properly installed within said predetermined area. Stanley discloses the other occupant detection system, wherein the child seat sensor has been taught in column 6, lines 1-40. The advantage of child seat sensor is detecting whenever the occupant is out of position or whenever the rear facing infant's seat is present. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Steffens, Jr. et al.'s and Stanley's to produce the claimed invention. With the modified system the air

bag system is enabled or disabled properly according to the positions of the occupant or child infant seat.

Claims 2, 3, and 5: In columns 3, lines 41-45, Stanley discloses that the "generally desirable to not activate an automatic safety restraint actuator if an associated occupant is not present because of the otherwise unnecessary costs and inconveniences associated with the replacement of a deployed air bag inflation system". Stanley discloses all features recited in those claims.

Claim 6: Steffens, Jr. et al. disclose said system and a method for controlling an occupant restraint system, wherein said at least one modifier sensor includes a seat belt usage sensor for determining whether a seat belt harness is being utilized by the occupant and wherein said modifier signal is generated as a positive modifier signal when said seat belt harness is in an engaged position and is generated as negative modifier signal when said seat belt harness is in a disengaged position (Column 2, lines 51-67; Column 3, lines 1-25; Fig. 2).

Claim 7: Steffens, Jr. et al. disclose "a web or belt payout sensor 64 is operatively connected to a seat belt retractor 66 and is electrically connected to the controller 24". Therefore, one skill in art to realize that the system of Steffens, Jr. et al. controls deployment of a seat belt retractor to reduce forward momentum of the occupant.

Claims 36-40: Neither Steffens, Jr. et al. nor Stanley mentions about the processing unit discussed in claim 1 includes a network capable of learning various vehicle characteristics unique to vehicle type and size and adapting output signal signal

to account for different vehicle type, and said network capable of learning passenger compartment sizes. However, such features are inherent existed. The system and a method for controlling an occupant restraint system as disclosed by Steffens, Jr. et al. and Stanley are certainly applied for various vehicle types and sizes, or compartment vehicle sizes.

Claims 13, 14, 27, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steffens, Jr. et al. (U.S. 5626359), Stanley (U.S. 6220627) and further in view of Gille (US 5468013).

Claims 13 and 14: Steffens, Jr. et al. and Stanley disclose the occupant restraint system with all features in the claim has been discussed in the previous paragraph except for controlling the deflation speed of said airbag. Gille disclose the other occupant restraint system that comprises the missing feature in Steffens, Jr. et al.'s and Stanley's. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Steffens, Jr. et al.'s, Stanley's and Gille to produce all features of the claimed. The occupant restraint system includes controlling the deflation rate would be an improvement in protecting occupant from possible injury caused by the inflation of the air bag.

Claims 27, and 41: Steffens, Jr. et al. disclose said occupant restraint system, including programming the processing unit with a fuzzy logic analysis process to generate the plurality of output signals based on the plurality of input signals before optimizing the deployment of the occupant restraint system (See abstract; Fig. 2).

Response to Amendment

This communication is the response to the applicant that the cited references still read on the features as claimed in the present application. As explained in the previous office action the combination of Steffens, Jr. et al, Stanley, and Gille would address the claimed invention.

The applicant's argument is that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the patent No. 5,626,359 to Steffens, Jr. et al. obviously disclose the occupant presence sensor (See Column 3, Lines 10-26) and seatbelt usage sensor (Column 2, Lines 66-67; Column 3, Lines 59-63). And the U.S patent No. 6,220,627 to Stanley focused on the child seat sensor introducing in the abstract and described in detail in column 6, lines 7-59. Although the step shown in the Figure 4 of Steffens seems to show that the system taught by Steffens teaches away from the invention but this step is one of plurality steps performed in the complex system of Steffens. However, such the teachings of Steffens are similar with the teachings of the invention. For example, Figure 2 illustrates a system including a plurality elements: occupant sensors 80, 84, 86, belt payout sensor 64, seat position sensor 30, controller 24, squib 104, airbag 102, seat belt controls 124,

which are the combination to perform enabling or disabling the restraint system. Therefore, the occupant restraint system is enable or disable according to the modifier signals generated from the occupant presence sensor, seat belt sensor, or a child seat sensor.

In response to the applicant that Steffens do not disclose at least one modifier sensor that generates a modifier signal representative of either a positive condition to enable an occupant restraint system or a negative condition to disable the occupant restraint where the modifier signal disables at least one of an airbag control or a seat belt control as soon as at least one negative condition is identified and does not disable the airbag control or the seat belt control if all predetermined conditions are positive condition. It is notify that the act of either disabling or enabling the restraint system upon either the negative condition or positive condition is the act which performed by the sensors associated with the controller 24 taught in Steffens. One artisan skilled in the art is able to realize that a plurality of sensors taught in Steffens are considered as the detecting devices for detecting various conditions of the occupant and then the controller activates the safety device based on the input signals of those sensors.

In response to the applicant that Stanley do not teach the occupant restraint system as claimed by applicant. It is not persuasive because the occupant detection system of Stanley focused on the controlling the deploying the airbag based on the position of the child. In addition, Stanley discloses that it is important to deploy the correct airbag, for example the side airbag is disable when a rear facing infant seat is present.

For the reasons set forth above, the application is not placed in a condition of allowance. The combination of Steffens, Jr. et al. and Stanley, and Gille would disclose or suggest the occupant restraint system as claimed by applicant.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan C To whose telephone number is (703) 308-6273. The examiner can normally be reached on from 8:00AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and none for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

/tc

June 1, 2003

THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP